# ESV16U, ESV32U
# Quick Installation Guide

16CH and 32CH Network Video Recorder with Local Display

**surveillix sv**

Version 1.0.0

## Table of Contents

Refer to the user's manual (PDF file) contained in the CD-ROM for settings, operations and other information.

The application Adobe® Reader® is needed to view PDF files. If you do not have this application, download it from the Adobe Systems Incorporated website.
http://www.adobe.com/

For information on our latest products and peripheral devices, refer to the following Website:
http://www.toshibasecurity.com

# Preliminary

Thank you for purchasing the ESV16U and ESV32U Network Video Recorder (NVR). Before using the NVR, read this quick installation guide (QIG) carefully to ensure correct usage. After reading this quick installation guide (QIG), save it for future reference.

The design, specifications, software, and QIG contents are subject to change without prior notice.

**FCC (USA)-INFORMATION**
**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**USER-INSTALLER CAUTION:** Your authority to operate this FCC verified equipment could be voided if you make changes or modifications not expressly approved by the party.

**Terms and Trademarks**
* The term "OS" is used in this manual to indicate operating systems
 compatible with this product.
  -- Microsoft® Windows® XP xxxx Edition
  -- Microsoft® Windows Vista® Business Edition
  -- Microsoft® Windows® 7 Professional Edition

● Microsoft, Windows, Windows Vista and Internet Explorer are trademarks or registered trademarks of Microsoft Corporation in the United States and other countries.
● Intel and Intel Core are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.
● Adobe and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.
● Other product names appearing in this quick start guide may be trademarks or registered trademarks of their respective holders.

**Important Safeguards**

**1. Read Instructions**

Read all the safety and operating instructions before operating the product.

**2. Retain Instructions**

Retain the safety instructions and user's manual for future reference.

**3. Warnings**

Comply with all warnings on the product and in the user's manual.

**4. Follow Instructions**

Follow all operating and use instructions.

**5. Cleaning**

Disconnect this NVR from the power supply before cleaning.

**6. Attachments**

Do not use attachments not recommended by the NVR manufacturer as they may pose safety risks.

**7. Water and Moisture**

Do not use this NVR near water. Some examples are: near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

**8. Accessories**

Do not place this NVR on an unstable cart, stand, tripod, bracket or table. The NVR may fall, causing serious injury to a person, or serious damage to the product. Use only rack with bracket, or table recommended by the manufacturer, or sold with the NVR. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

**9. Ventilation**

This NVR should never be placed near or over a radiator or heat register. If this product is placed in a built-in installation, verify that there is proper ventilation so that the NVR temperature operates within the recommended temperature range.

**10. Power Sources**

This NVR should be operated only from the type of power source indicated on the information label. If you are not sure of the type of power supply at your location, consult your product dealer.

**11. Power-Cord Protection**

Power cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, screws and the point where they exit the product.

**12. Installation**

Install this NVR on a secure location. If installed on an unsecured location, the NVR could fall causing injury and damage.

**13. Lightning**

For additional protection on this NVR during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the power supply and cable system. This will prevent damage to the NVR due to lightning and power-line surges. If lightning occurs, do not touch the unit or any connected cables in order to avoid electric shock.

### 14. Overloading
Do not overload the power supply or extension cords as this can result in a risk of fire or electric shock.

### 15. Object and Liquid Entry
Never push objects of any kind into this NVR through openings as they may touch dangerous electrical points or short-out parts that could result in a fire or electrical shock. Never intentionally spill liquid of any kind on the NVR.

### 16. Servicing
Do not attempt to service this NVR yourself as opening or removing covers may expose you to dangerous electrical or other hazards. Refer all servicing to qualified service personnel.

### 17. Damage Requiring Service
Disconnect this NVR from the power supply and refer servicing to qualified service personnel under the following conditions.
a. When the power-supply cord or plug is damaged.
b. If liquid has been spilled, or objects have fallen into the NVR.
c. If the NVR has been submerged in water.
d. If the NVR does not operate normally by following the operating
  instructions in the user's manual. Adjust only those controls that are
  covered by the user's manual as an improper adjustment of other controls
  may result in damage and will often require extensive work by a qualified
  technician to restore the NVR to its normal operation.
e. If the NVR has been dropped or the cabinet has been damaged.
f. When the NVR exhibiting a distinct change in performance which indicates
  a need for service.
g. Other trouble.

### 18. Other trouble. Replacement Parts
When replacing parts, be sure the service technician uses parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

### 19. Safety Check
Upon completion of any service or repairs to this NVR, ask the service technician to perform safety checks to determine that the NVR is in proper operating condition.

CAUTION TO REDUCE THE RISK OF ELECTRIC SHOCK.
DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER
SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.

**WARNING:**
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS
APPLIANCE TO RAIN OR MOISTURE.

**FIELD INSTALLATION MARKING:**
WORDED: "THIS INSTALLATION SHOULD BE MADE BY A QUALIFIED SERVICE
PERSON AND SHOULD CONFORM TO ALL LOCAL CODES."

**Precautions for Use**
**Disclaimer**
We disclaim any responsibility and shall be held harmless for any damages or
losses incurred by the user in any of the following cases:
1. Fire, earthquake or any other act of God; acts by third parties; misuse by
 the user, whether intentional or accidental; use under extreme operating
 conditions.
2. Malfunction or non-function resulting in indirect, additional or
 consequential damages, including but not limited to loss of expected income
 and suspension of business activities.
3. Incorrect use not in compliance with instructions in this user's manual.
4. Malfunctions resulting from misconnection to other equipment.
5. Repairs or modifications made by the user or caused to be made by the
 user and carried out by an unauthorized third party.

Notwithstanding the foregoing, Toshiba's liabilities shall not, in any
circumstances, exceed the purchase price of the product.

**Copyright and Right of Portrait**
There may be a conflict with the Copyright Law and other laws when a
customer uses, displays, distributes, or exhibits an image picked up by the
camera without permission from the copyright holder. Please also note that
transfer of an image or file covered by copyright is restricted to use within
the scope permitted by the Copyright Law.

**Protection of Personal Information**

Images taken by the camera that reveal the likeness of an individual person may be considered personal information. To disclose, exhibit or transmit those images over the internet or otherwise, consent of the person may be required.

**Usage Limitation**

The product is not designed for any "critical applications." "Critical applications" means life support systems, exhaust or smoke extraction applications, medical applications, commercial aviation, mass transit applications, military applications, homeland security applications, nuclear facilities or systems or any other applications where product failure could lead to injury to persons or loss of life or catastrophic property damage. Accordingly, Toshiba disclaims any and all liability arising out of the use of the product in any critical applications.

**System Requirements**

Recommended personal computer system requirements:

-- Windows® XP, Windows Vista® Business, or Windows® 7 professional.

-- Internet Explorer® Ver 8.0 or above

-- CPU: Intel® Core™2 Duo   2.4GHz or higher

-- Memory: 2GB RAM

-- Network: 100 Megabit Network Interface or above

-- Graphic adapter: AGP or PCI-Express, minimum 1024x768, 16 bit colors.
   *Make sure your display DPI setting is set to default at 96DPI*

**Package Contents**

- Network Video Recorder without HDD
- Power cord
- LAN cable
- Quick Installation Guide
- Warranty Card
- CD-ROM (User's Manual, QIG, CMS Basic, NVR Device Search)
- Rack Mounting Kits (Ears, Handles)
- Screws
  - Flat head 3 x 6, 2pcs
  - Flat head #6-32 x 4, 20pcs
  - Pan Head 4 x 4.2, 4pcs

# System Overview

## Front View
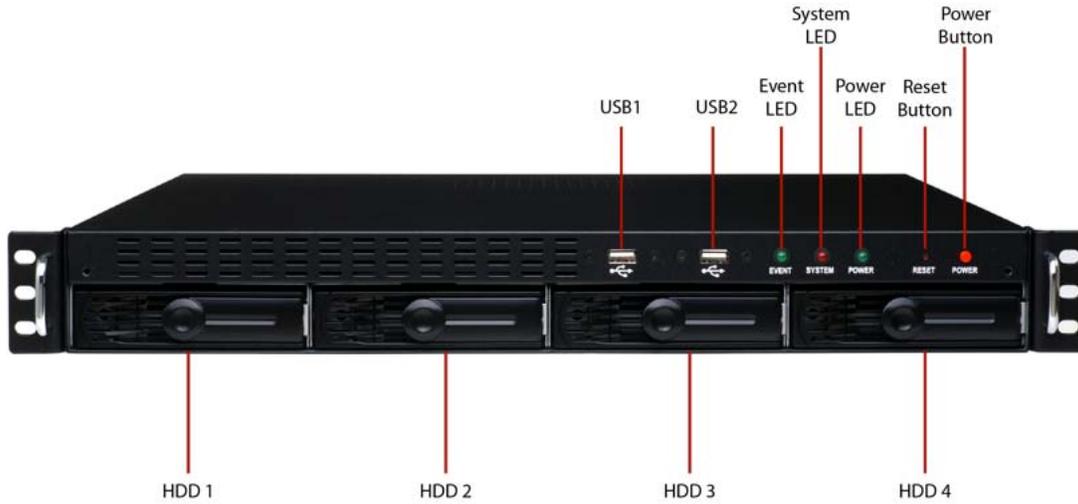


## Rear View
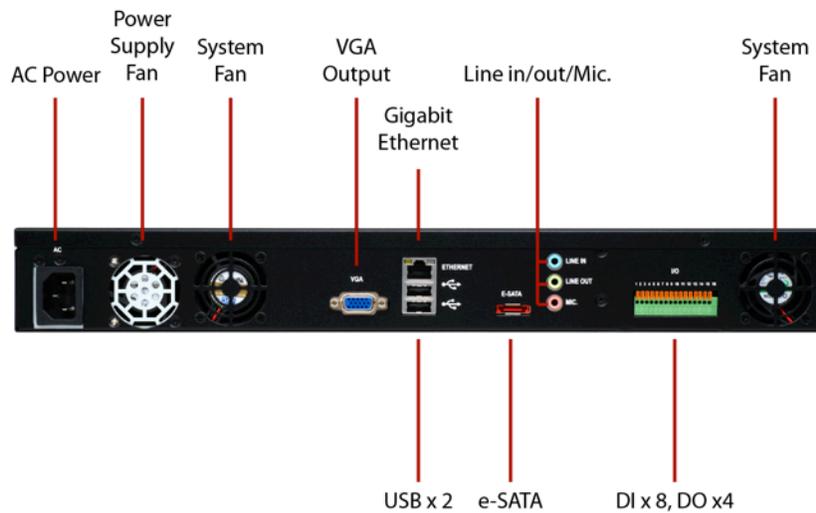
## LED Status

| Buttons | |
|---|---|
| Power | |
| Reset/Restore default | • Press and release for restart<br>• Press and hold for 3 seconds then release for restore to default, when 3 seconds is reached, System LED blinks until release of the button |
| LEDs | |
| Restore default | • System LED blinks during the process<br>• Power LED stays solid |
| Restart | • Power LED stays solid<br>• System LED off |
| Power | • Blue<br>• During power on/restart/reset to default/OS fail: stays solid |
| System | • Amber<br>• During firmware upgrade: blinking<br>• System failure (AP fail): off<br>• System Normal: Solid |
| Event | • Amber<br>• During event recording: solid<br>• No event: off |

# Installation

## HDD Installation



Start by removing the front plate.



To remove the front plate, turn the tool-less screws on both sides counter-clock wise to loosen it from the unit. Please note the screws will still be attached to the front plate even after the screws are completely loosened from the unit.

Simply pull to remove the front plate once the screws are loosened from the unit.



Release the HDD tray by pulling the latch.

Pull the HDD tray out of the case.
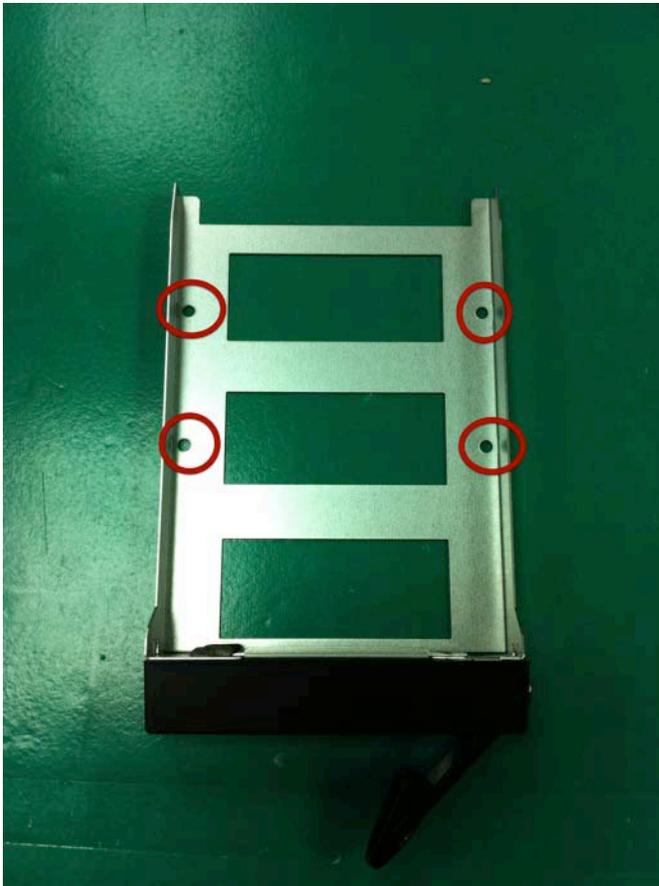


Once the tray is removed from the unit, notice there are four holes, which are used to secure the HDD.
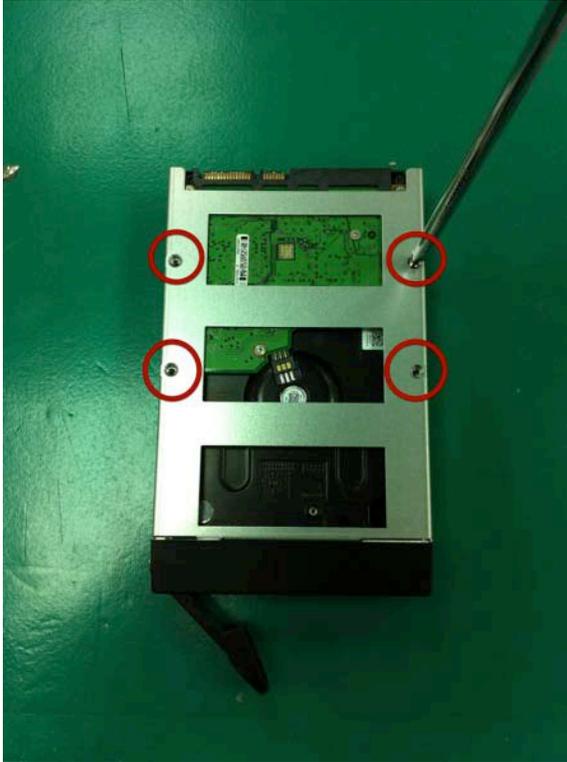
Once the HDD is placed in the tray, flip it over, align the tray screw holes with the HDD screw holes and secure the HDD with the supplied screws (Flat head #6-32 x 4).
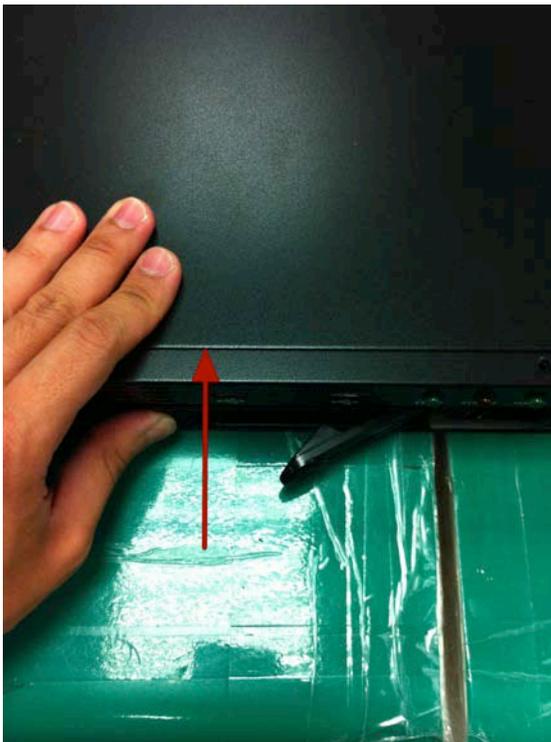
Put the HDD tray back in the case and insert it completely.



Secure the HDD tray by pushing in the latch, which locks the HDD tray with the unit.

**NOTE:**
Maximum capacity of each hard disk drive is 3TB.
Do not use hard disk drives with power saving functions such as Intellipower.
For a list of compatible hard disk drives, visit www.toshibasecurity.com."

## Rack Mounting Kits and Screws



1. Flat head 3 x 6, 2pcs
2. Flat head #6-32 x 4, 20pcs
3. Pan Head 4 x 4.2, 4pcs
4. Handle, 2pcs
5. Ear, 2pcs

Secure the Rack Mount Kits with the supplied screws as shown.



Note:
● The screws of #1 are spare.
● The remaining screws of #2 are used in order to install HDD. Please refer to page 13 of the QSG.

## Connecting to the NVR

There are various ways you can connect to the NVR and below are the suggested methods for different network setup:

**Through the browser from another PC on the network:**
• The NVR is placed in a network with a DHCP server: Connect to the NVR by using **"NVR Device Search" Utility**
• The NVR is placed in a network without DHCP server (or you are connecting to it directly): **Access the NVR with its default IP**

**Direct operation:**
Connect a USB keyboard and mouse to the NVR's USB port and a monitor with VGA input to the VGA output port in the back of the NVR.

## Using NVR Device Search Utility
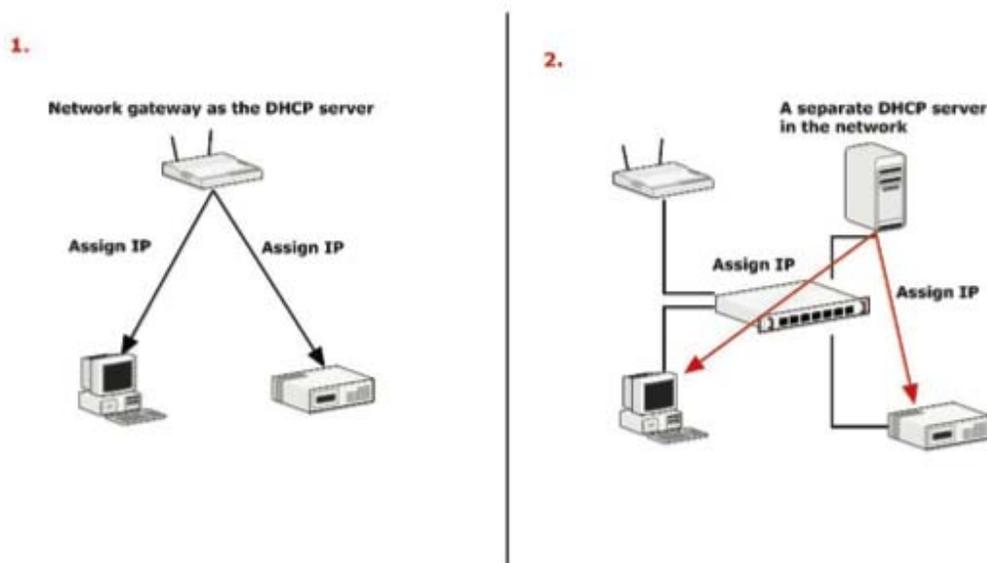


If the NVR is placed in a corporate network or a local area network where a DHCP server is already presented, run the "NVR Device Search" utility from a computer that is on the same network and locate the NVR with its IP address that is assigned by the top-level DHCP server.
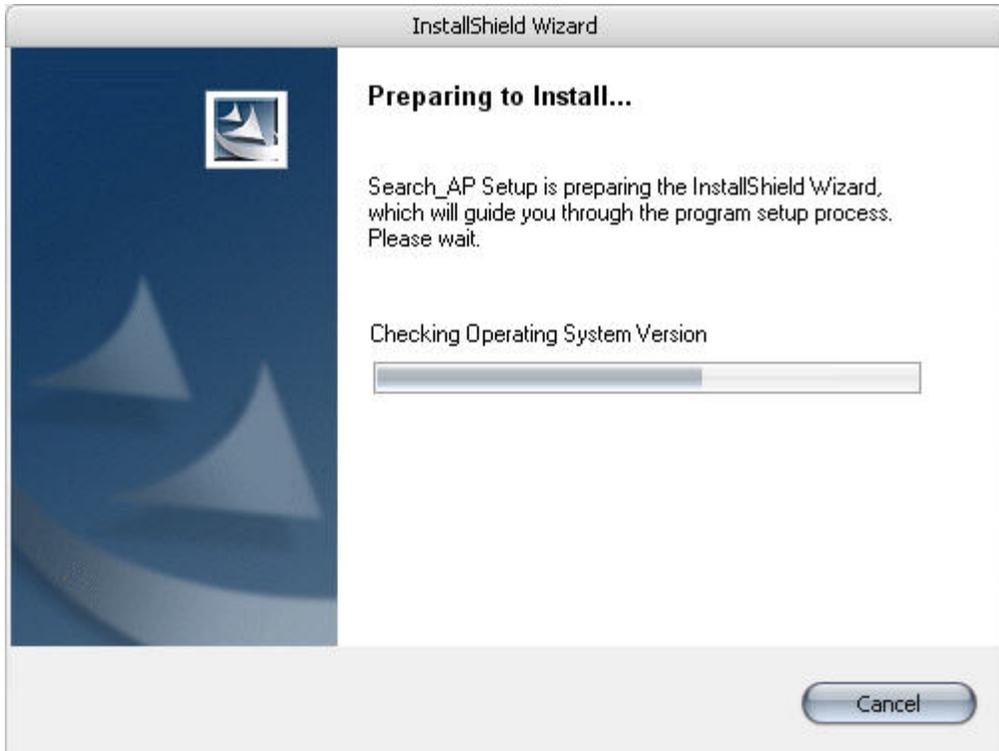
To begin, launch the "NVR Device Search" utility from the CD and proceed with the installation:
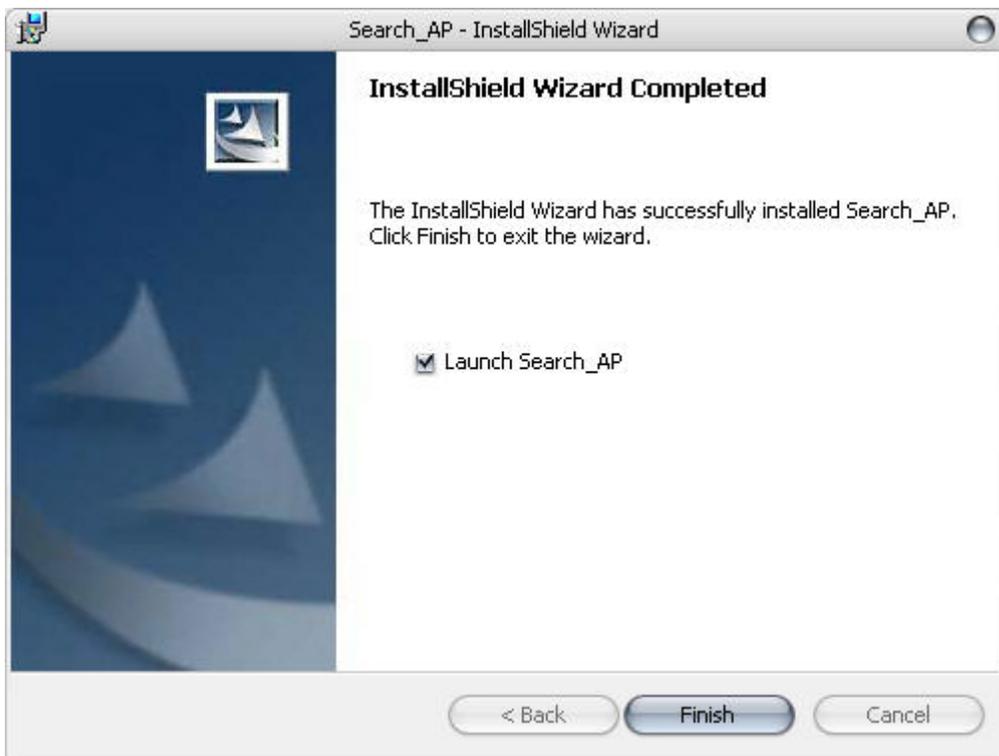
Once the installation is complete, check the "Launch the Search AP" option and click "Finish".



The search should start automatically and its status should be displayed.
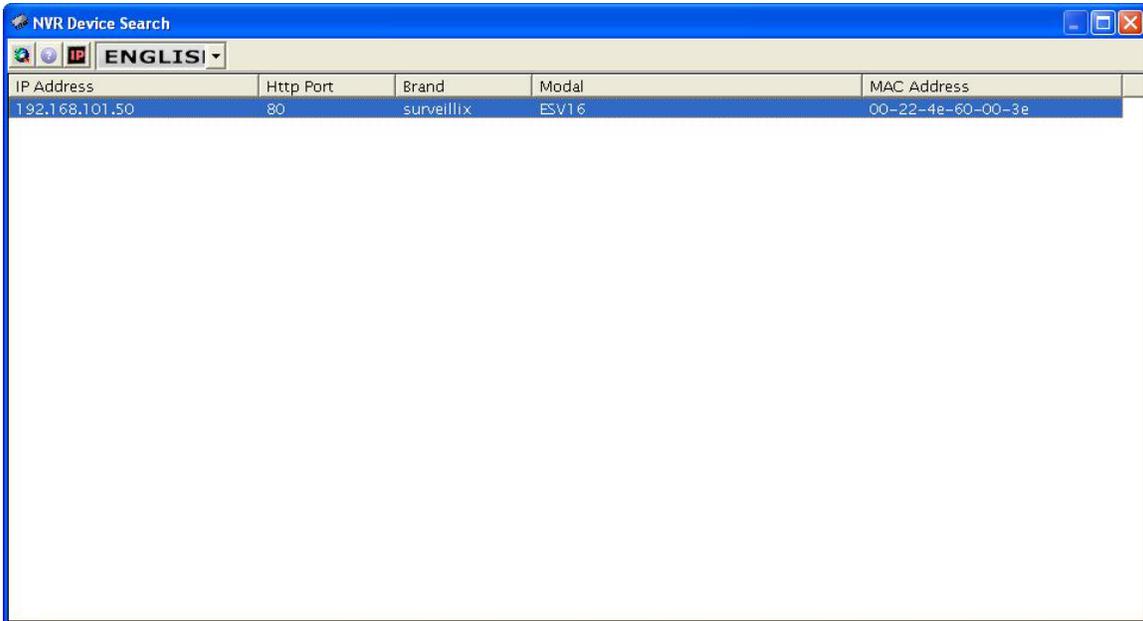


The NVR should be located and its IP address should be displayed.
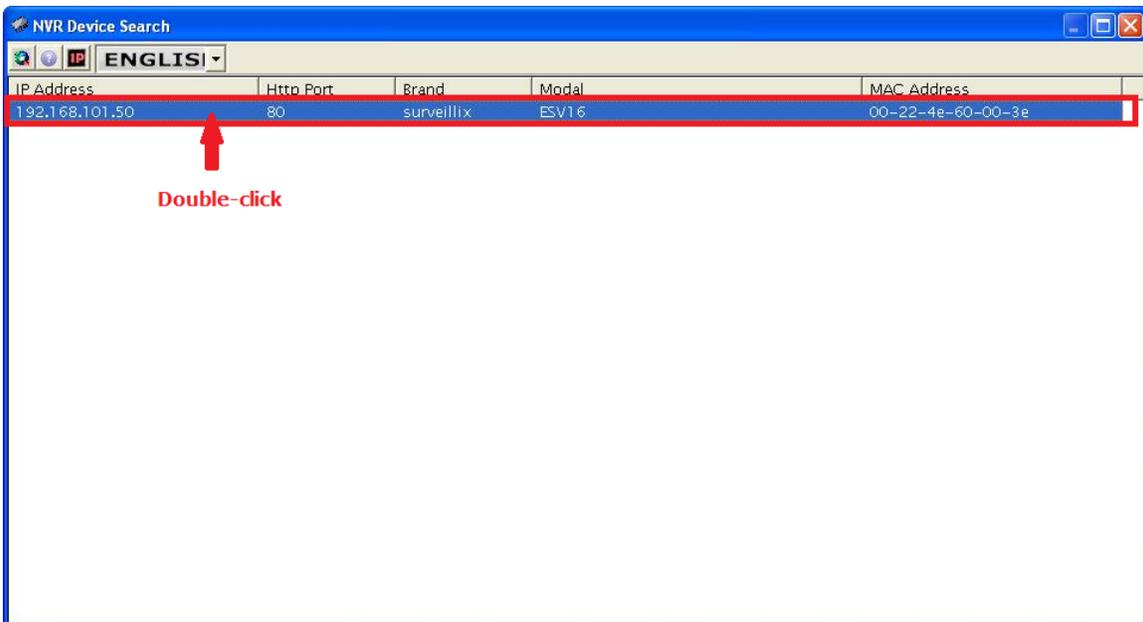
Double-click on an NVR and the search program should automatically access the NVR's web administration page from your default browser.
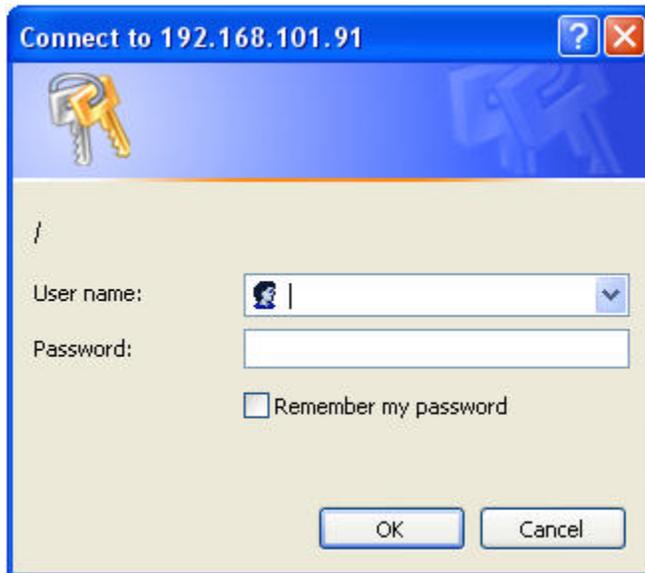


You will be prompted for the NVR's username and password. Enter its default username **"admin"** and password **"admin"** and then click "OK" to enter the system

## Accessing the NVR with its default IP address
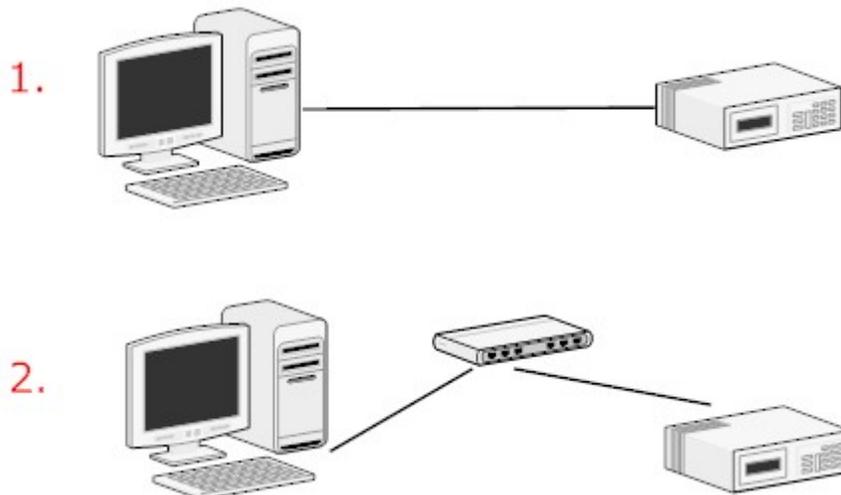


The NVR comes with a pre-configured static IP "**192.168.101.50**". However, it is only used when there is no DHCP server presented in the network. The NVR will turn on its DHCP server function and act as the DHCP server in the network. To connect to the NVR, use a PC that is on the same network over a switch or hub, or connect the PC directly to the NVR using a crossover CAT5 Ethernet cable.
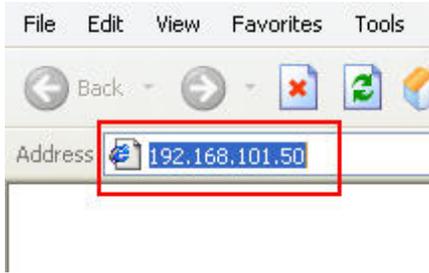
The PC that is connected directly to the NVR (or within the same local area network) should receive an IP from the NVR. Simply access the NVR from your web browser with its IP address
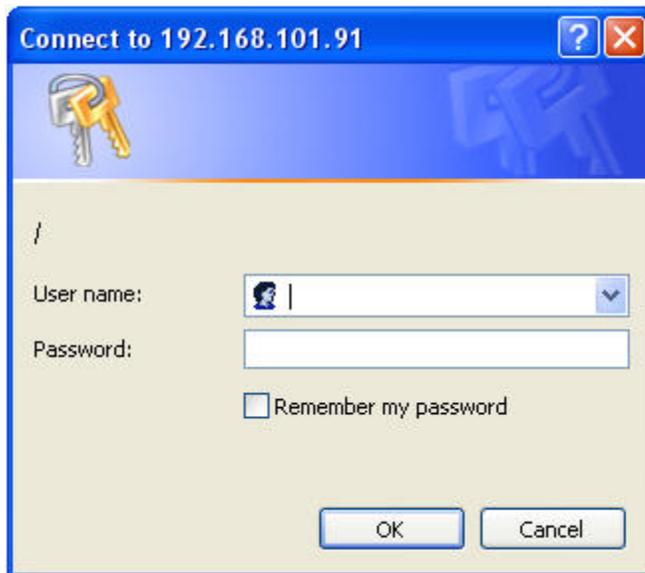


Again, you should be prompted for the username and password. Enter its default username "**admin**" and password "**admin**" and then click"OK" to enter the system

## Password Setup



The default login username and password is admin/admin. To change the password of the admin account, go to "Setup" --> "System Con-figurations" --> "User Account", click on the "admin" account in the account list then press the "edit" button to change its password. Finally, click "Apply" to save the change.

## Camera Installation

### Adding a Camera -- Automatic Search



Click the "Search" button to perform the camera search.



You will be prompted to install Active Control component in order for the search to function properly. Go ahead and click "Install"
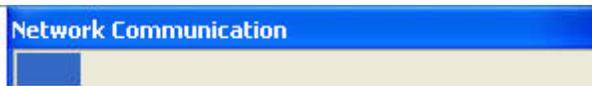


After that, the search should begin and its status should be displayed:

Found cameras should be listed and simply select a camera from the list and press "Configure"



Its corresponding information should be displayed in the "Camera Information" section. Enter its username and password and select the channel ID and name the camera.

Click on "Detect" to establish connection between the recorder and the camera. If a connection is established successfully, the camera's detailed information will be displayed as below.
Adjust its video format, frame rate, resolution or bitrate...etc if you wish and then click "Add" to finish adding the camera

## Adding a camera manually
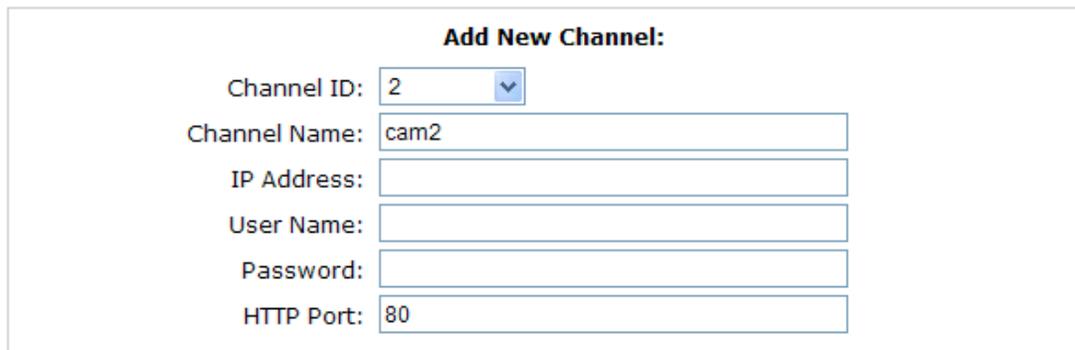


Simply follow the instruction described above but instead of using the "Search" function, enter the camera's IP address and credential in the "Camera Information" manually